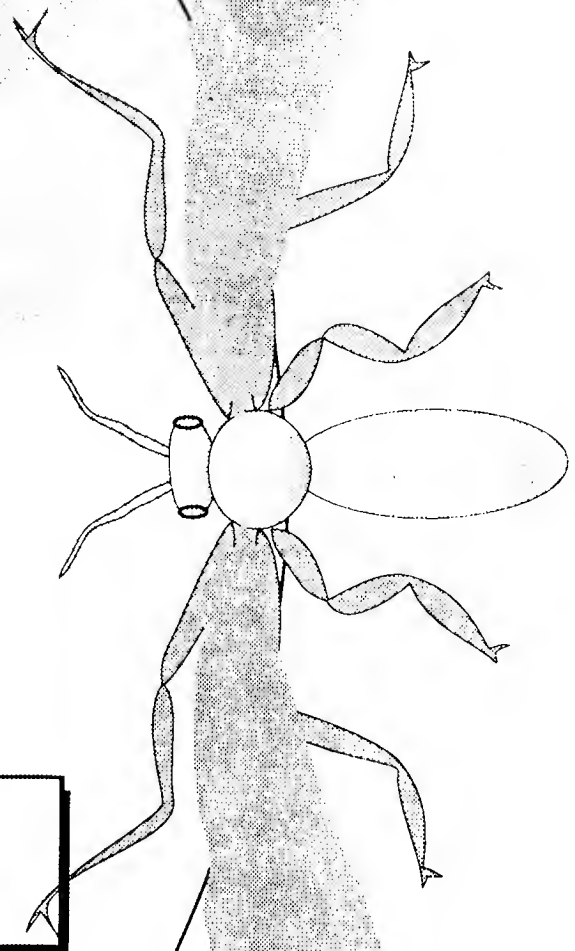
July 1991 Edition
Volume 10/Number 7

Apple Bug

the newsletter of Apple-Q Inc.



In this Months Issue

Wanted
Articles For AppleBug
Apply within . . .

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THE BRISBANE APPLE USERS' GROUP

Apple-Q Inc. Diary

This Meeting

Sunday July 21st

General meeting:	11.00am - 4.30pm.
Demonstration:	12.00am start.
Committee meeting:	3.00pm start.

Next Meeting

Sunday August 18th

General meeting:	11.00am - 4.30pm.
Demonstration:	2.00am start.
Committee meeting:	3.00pm start.

July 21st

Demonstration

A demonstration by John Aspland on the Explore a story series : educational software . . .

August 18th

Demonstration

A demonstration by Dale on HyperCard GS and by Kelvin on HyperStudio, see for yourself the merits/pitfalls of each package.

Notes . . .

Things to come..

The Committee tries to set up demonstrations and other events like the auction to cover the many and varied tastes of our members. We are always on the lookout for anyone who might like to help in this area to either run a demo or suggest ideas for future demonstrations or events.

It really does not take great computer skills and knowledge to present a demonstration, just a basic knowledge of the topic being presented. It could be a demonstration of software, for example an art program or music program, or on hardware like a scanner or a video card.

If you would like to present a Demonstration or like to see one, let us know. Feedback from club members aids us in planning future meetings.

Comming Attractions

Educational Software reviewed
HyperWars
Auctions.
Annual General Meeting.
Apple-Q Birthday Party.

The June Apple-Bug Award Goes to Kevin Riethmuller

New Members

Welcome to :

#175 G. Talbot	#177 S. Skill
#178 C. Cotter	#179 L. Johnson.

Renewals

Thank you for your continued support :

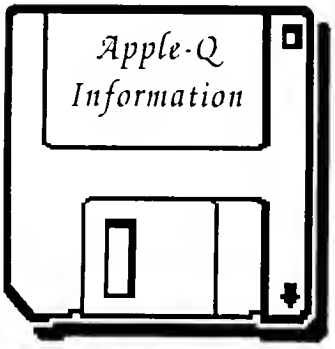
#46 J. Miller	#54 J. Fortescue
#65 M. Lockyer	#68 D. Dunnett
#92 M. Littlemann	#144 B. McDonnell

Trading Table

Apple-Q Inc. has for sale to members blank disks & other items that we buy in bulk in order to save you money & generate funds for the club.
For example:

DSDD Disks 3.5	{box 10}	- $ 14.00
DSDD Disks 5.25	{box 10}	- $ 8.00
DSHD Disks 3.5	{box 10}	- $ 22.00
Disk Satchells	{pkt 50}	- $ 7.00

Note: Prices are subject to change without notice, but are correct at the time of printing.



Public Domain Software

Apple-Q Inc. has a wide selection of Public Domain, Shareware and Demonstration software available to members. We charge a copying fee so the group can obtain more software to expand the library. The copying fee for 5.25 inch disks is 50 cents a side with a minimum charge of $2.00. For the 3.5 inch disks, the minimum fee is $3.00 per disk, with "Disks of the Month" costing a little extra than the older software in the clubs library.

On the inside back page you will find a software order form. This form can be used if you wish to order by mail or you can order & pick it up at the meeting. For mail orders, remember to add $2.00 for postage & packaging.

Meeting Format

As from the August Open day

11.00 am - 12.00 pm - Informal period
Trading table open. Hard copy Library Open.
Registration of members (new and renewals).
Software Library sales. Raffle Tickets sold.
Start of General Computer Time.

12.00 pm - 2.00 pm - Special Interest Groups
New Users (Beginners) SIG
Apple //GS Computers SIG
Macintosh Computers SIG
New Graphics SIG
Trading Table, Software Library continues.
General Computer time continues.

2.00 pm - 3.00 pm - Demonstration
SIGS, Trading Table, Libraries etc. close.
General computer time stops during Demo.
Invited speaker to give a demonstration.
Draw raffle prize and or door prize.

3.00 pm - Start Committee Meeting
General computer time continues.
Committee meeting starts. Members welcome.

5.00 pm - (approx) Open Day ends.
End of the General and Committee meetings.

Meeting Venu

Hooper Education Centre
Kuran Street, Wavell Heights.

Vistors Welcome.

Membership Fees

Adults/Students:	$25.00	
Corporate Membership:	$50.00	
Associate Membership:	$10.00	(BBS only)
Joining Fee:	$10.00	(first year only)

At the discretion of the Executive Committee

Articles for Apple-Bug

If you would like to contribute to Apple-Bug, please send in your article (on disk if possible) to Apple-Q or bring it along to the meeting. The deadline for Apple-Bug is the Open Day meeting. Disks will be returned.

Executive Committee

Ann White	President	(07) 371-4067
John Finch	Vice-President	(07) 260-5218
Bob Godbehere	Secretary	(07) 808-3892
Bob Godbehere	Treasurer	(07) 808-3892
Graham Black	Registrar	(07) 883-1525
Kelvin Saggers	Editor	Modem / Mail
Jeff Sellers	Software Librarian	(07) 359-1339
Ian Millar	Hardcopy Librarian	(07) 343-4261

Assisting

Vince Crosdale	Immediate Past Pres	(07) 351-3090
Dale Rodgie	Misc/Disk of Month	(075) 91-2819
Graham Wobcke	Assisting Software Librarian	

Bulletin Board

Name:	Apple-Q Inc. BBS
Telephone:	(07) 851-1711 [24 hrs - B.B.S.]
	(07) 351-3090 [7-9 pm - Voice]
Baud Rates:	300, 1200/75, 1200 & 2400 (CCITT & Bell)
Data Specs:	8 Data bits, 1 Stop bit, No Parity, Full Duplex
Sysops:	Vince Crosdale, Graham Black

Production Information

The Apple-Bug was written with AppleWorks and AppleWorks GS. AppleWorks GS was used for the Page Layout. Apple-Bug is printed by the Hooper Education Centre. Thanks to Computer City for the use of the LaserWriter used to produce the original copy.

More Info

- The copying of Commercially produced software is not sanctioned by Apple-Q Inc. and members who do so risk expulsion from the group.
- No one is allowed behind the Trading Table counter except the Committee members and anyone appointed to work at the Trading Table.

Advertising

Classified advertising is **Free** to all Financial Members. For non-members, the charges are **$18.00** for a Half Page and **$30.00** for a Full Page. For more information, contact the Editor .

Help Line

Apple II General
Bob Godbehere (07) 808-3892 7-9 pm & W/E

Apple IIgs
Vince Crosdale (07) 351-3090 7-9 pm
Dale Rodgie (075) 91-2819 7-9 pm
Graham Black (07) 883-1525 1-6 pm

Apple Macintosh
John Finch (07) 260-5218 7-9 pm & W/E

AppleWorks
Sheryl Mann (071) 96-7401 7-9 pm & W/E

AppleWorks (education)
Ann White (07) 371-4067 7-9 pm & W/E

AppleWorks GS
Dale Rodgie (075) 91-2819 7-9 pm

Applesoft
Graham Black (07) 883-1525 1-6 pm
Vince Crosdale (07) 351-3090 7-9 pm

Beginners
Ann White (07) 371-4067 7-9 pm & W/E
Graham Black (07) 883-1525 1-6 pm

Communications
Vince Crosdale (07) 351-3090 7-9 pm
Kelvin Saggers (07) 800-4660 Modem only

Disk of the Month
Jeff Sellers (07) 359-1339 7-9 pm

Educational Programs
Ann White (07) 371-4067 7-9 pm & W/E
John Aspland (07) 368-2420 7-9 pm
Geoff Galt (07) 355-5161 School hours

Machine Language (IIe, gs)
Dale Rodgie (075) 91-2819 7-9 pm

Modems
Vince Crosdale (07) 351-3090 7-9 pm
Kelvin Saggers (07) 800-4660 Modem only

Software Library
Jeff Sellers (07) 359-1339 7-9 pm & W/E
Dale Rodgie (075) 91-2819 7-9 pm

If you are free to aid other members and would like your name added to the list, let us know.

Please only call between the times listed. W/E stands for weekend.

Editorial

by Kelvin Saggers

Come Friday the 19th of July Dale, Ann and myself will be on our way down south to the Apple User Group Conference, and will therefore not be at the meeting on Sunday. Bob, Graham, Jeff, Ian, John, and the usual fine band of helpers will however be there, with business as usual. I only hope that whilst we are down there, we can dig up some useful, and interesting information for the group and the newsletter, and that it is not just a 'we are the greatest thing since sliced bread' exercise by Apple Australia.

Well even though it looked for sure that the Mac LC, and Apple //e card demonstration was just not to be... Computer City arrived {somewhat belatedly} on the scene, and put the system through it's paces. Many thanks to John Finch who filled in at the last moment with an excellent impromptu demonstration on how to stall for time.... and of course to Peter and George for their Mac LC demonstration.

The last Newsletter contained a request for feedback on the idea of a venue change. The response has been underwhelming {is anyone out there... just checking}, as far as I am aware no one other than committee members seem to want a say in this matter. The committee is still looking at possible, suitable, alternate venues. The main points we are looking at are - increased space, cheap rent, heaps of nearby free parking, plenty of power outlets, and a small area for lockable onsite storage. In short we want what we now have, but with more room to move, so if you know of such a spot please let us know.

As from August the meeting format will change, this is due in part to requests made on some of the survey forms we have received todate. The new format is shown on page 3 of this issue {please note the July meeting will retain the old format of a demonstration from 12.00 p.m. to 1.00 p.m., and SIGS starting at 1.30 p.m.. It was felt that moving the Demonstration to 2.00 p.m. - 3.00 p.m. will. cause less disruption to SIGS etc.

Apple Australia have just started to publish (again) a quarterly newsletter, which goes by the original name of AppleNews, and it is available for **free** to Apple owners.

The Autumn 1991 issues consists of 8 pages which contains over 7 pages of Mac news, and almost a page on the Apple //GS {95% of which is on HyperCard}, with nothing on the Apple //e, //c, or Apple //+. To be fair, the word Apple //e does come up a few times, in the guise of a Mac card that almost costs as much as the real thing.

Your local Apple dealer should have copies of AppleNews available for free. Inside the Autumn issue you will find two, postage free, subscription cards, & an offer on a free System 7.0 {Mac} "Sniffer disk". Just fill out one of the subscription cards, and send it to Apple Australia to gain your free subscription.

I'll leave you with something to ponder upon - Apple and Ibm have been having top level talks in the USA according to an article in the Australian , makes you wonder what's really going on ...

HyperCard IIgs Review

by Dale Rodgie

After months of waiting, I have finally received a working copy of HyperCard IIgs - described as the "AppleSoft of the 90's". HyperCard was first published for the Macintosh in 1987. Like the AppleSoft of the early 80's, HyperCard caused a revolution in the Macintosh ranks. HyperCard allows the user to design the application you always wanted.

What is HyperCard?

HyperCard is designed upon the idea similar to the old cards you find in offices. In some ways the same terminology is used. In the office you would have a stack of cards - the same in HyperCard. To better explain the HyperCard concept, let's look at the objects that make HyperCard what it is:

Stack

A stack is a number of backgrounds and cards in a single file. It is both a program and a document in one since program code and information is stored in it. A stack can be of any size, even larger than available memory. HyperCard only loads in the necessary part of the stack to display the current card.

Another feature of HyperCard is that it does not have a "Save" option. HyperCard saves any changes to the stack while you are working on it. You can also stop others using or changing your stack using password protection. The only problem is that you must remember the password, or you will not be able to access and/or modify your stack.

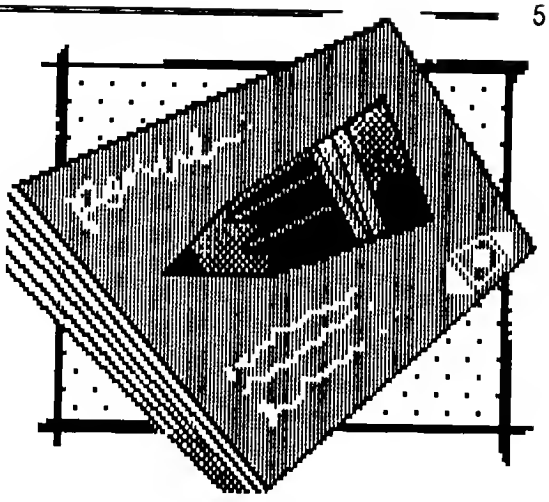
Another one of the options in the File menu is "Compact Stack". The way that HyperCard works in saving the stack, means it needs space inside the stack to store new information. Using the "Compact Stack" option you can remove all that free space. When you select this option, HyperCard copies the stack to another file while removing the space. This means that you will need about the same space on your disk as the original stack otherwise an error message is displayed.

When you launch HyperCard IIGS, it loads in the Home stack. In fact, even if you launch HyperCard by clicking on any stack - the Home stack will be loaded first, then the selected stack. You do not see this happening, however this allows you to use the icons and XCmds (see XCmds) from the Home stack in your own stack.

Card

Like the cardboard counterpart, a HyperCard card can hold written information on a card, however, you can also store pictures, music & sounds. You can also launch an application, print a document, read text files & do a whole lot more from a card.

A card is transparent so that the background can be seen.



You can of course draw anything on the card and it will cover the background.

Background

If you want a picture, button or field to appear on more than one card, you can put them on the background. This is a good way to keep the size of the stack down. You select the background by going to a card that uses that background and selecting "Background" from the Edit menu.

One thing to watch for with viewing the background is that you can use any of the tool from the tools menu except the hand (see **Figure 2**). When you select the hand icon, it switches to the card. I have often not realized this and continued to draw on what I thought was the background, but was a card. You will know that you are working on the background if the word "*Background*" appears in the right end of the menu bar (if the menu bar is showing).

Button

Buttons in HyperCard are just like buttons you find in other desktop programs. You can have opaque, rectangular, shadow, icon, check box & radio buttons. However you can also have transparent buttons. This allows you to turn anything you draw into a button.

When someone clicks on the button, you can make it go to another card or stack, or run a script (see HyperTalk below) to do just about anything. This makes buttons the most useful object on a card.

Using scripts, you can show or hide buttons. This stops the user clicking on the wrong button and it allows you to use buttons as labels or in animation.

Field

A field is a box that holds text information. You can choose any font, size, colour & style you like for the text, however, you are only limited to one font, etc. in a single field. Fields can be transparent, opaque, rectangular, shadow and scrolling.

When you put a field on the background, you can set so that it displays the same text on each card or the same field can hold different text on each card. So creating a data base

is easy - just put the fields on the background and type in a new record on each card.

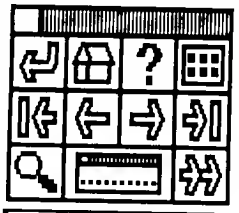


Figure One HyperCard Go Menu

HyperTalk

HyperCard has its own programming language called HyperTalk. A script is the HyperTalk code for a particular object. Every object from the stack to the field can have a script.

HyperTalk is an object orientated language where any of the objects (Stack, Cards, Background, Button, Field) can be addressed. There is a whole range of information HyperTalk can give you on any object - they are called *Properties*. Also, in many cases, you can change the property of an object.

Script Example

The HyperTalk script is activated when a certain event is detected. A good example of an event is when you click the mouse. Most scripts on buttons check from a mouse click before they do their thing. Below is an example of a button script:

```
on mouseup
  go to card 1
end mouseup
```

This script waits for the user to click on the HyperCard button and release then mouse button. HyperCard then sends the event to the script and it takes over. The line `on mouseup` tells HyperCard that this script will only work with a mouse up event. Notice how the script ends with the lineend `mouseup`, this signals the end of the script for that event. The line `go to card 1` means just that. It tells HyperCard to display the first card in the current stack.

As you can see, HyperTalk is easy to learn since it is an English like language. In most cases, I did not know the correct way to set out a command, so I typed in what I would normally say - then if that did not work, I changed the words around to make it work.

Like AppleSoft BASIC, HyperTalk is an interpreted language. Which means it is not as fast as a compiled language, however it does not need to be compiled - making it easy to change.

XCmds

XCmds are add on commands that can be used in HyperTalk scripts. The stack ScriptersTools that comes with the HyperCard package has a number of useful XCmds that you can add to any stack. XCmds can be written in Machine Language or higher level languages and then compiled.

You do not need to be a programming expert to use the XCmds supplied - the ScriptersTools stack describes how to use each XCmd.

User Levels

There are five levels in HyperCard - They are:

1. Browsing
2. Typing
3. Painting
4. Authoring
5. Scripting

They are called **User Levels** and they determine what level of access a user has to your stack.

The **Browsing level** allows you to view the cards in the stack, search for text, print information, and also click buttons.

The **Typing level** allows you to do the same as the Browsing level as well as typing and editing text in fields (fields can be set so the information is locked). You can also create and delete cards.

The **Painting level** gives you the same options as the Typing level plus you can draw on either the background or card. You can also create and delete stacks.

The **Authoring level** give you the advantages of the Painting level with the ability to create, modify, delete buttons and fields.

The highest level, the **Scripting level** gives you the power of the Authoring level with the added ability to write scripts for any object. This is the level I use the most.

Menus

The number of menus, and what menus are available depend on what tool you are using and what you have the user level is set to. I have listed some of the menu options below - you will notice the term "*tear off menu*" used. This is a pull down menu that can be torn off and placed any where on the screen. The first example I have seen of this is in a program called IconEd. When you tear off the menu, it turns into a "*windoid*". A windoid is window that is always the foremost window. In the case of HyperCard, the windoids will still be displayed when you change card or stack.

Now lets look at HyperCard's menu options:

The File Menu

New Stack... - This command allows you to create a new stack with a blank background or the current background.

Import Paint... - Import a graphic for either a card or the background.

Export Paint... - Export a graphic to a Apple Preferred File format.

Print Card - Dumps the current card as a graphic to the printer.

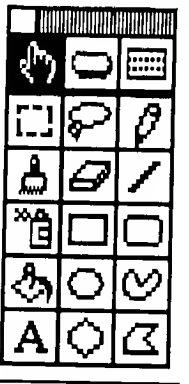


Figure Two HyperCard Tool Menu

The Edit Menu.

New Card - Create new card.

Text Style... - Select the font, size, style and colour.

Background - Show the current background.

The Go Menu.

Back - Displays the last card you saw.

Home - Returns you to the Home Stack.

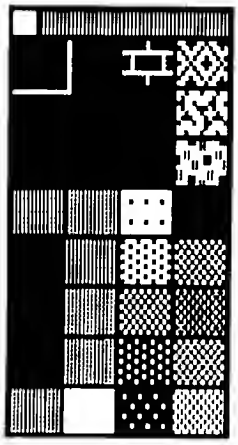


Figure Three HyperCard Patterns Menu

Help - Takes you to the Help Stack.

Recent - Displays a list of the last 18 cards you saw. You can double click on any of them to go to that card.

First - Go to the first card in the current stack.

Prev - Go to the previous card in the current stack.

Next - Go to the next card in the current stack.

Last - Go to the last card in the current stack.

Find - Find a word on a card.

Message - Display Message Box.

Show All Cards - Shows all cards in quick succession.

When you hold down Open Apple key before you pull down the Go Menu, HyperCard will display a tear off Go Menu (see **Figure 1**).

The Tools Menu is a tear off menu (see **Figure 2**). It contains 18 tools - 15 for painting and three for working with buttons and fields.

The Objects Menu contains options that allow you to get information on buttons, fields, cards, backgrounds and the stack. It also contains options to create new buttons, fields and backgrounds.

The Paint Menu

Grid - Lines and boxes etc. you draw will snap to a grid.

FatBits - Displays a part of the screen magnified.

Power Keys - Turns on 19 key short cuts for painting.

Edit Pattern... - Allows you to edit any of the patterns.

Choose ColorSet... - Choose between 5 colour palettes for the stack, background or card. You can also change the palettes using a New Disk Accessory or XCmd.

The Patterns Menu is another tear off HyperCard GS menu (see **Figure 3**). It contains 36 patterns - 16 colours and 16 patterns.

Requirements

HyperCard IIgs requires an Apple IIgs with a ROM 1 or 3, 1.5 megabytes of RAM (the manual suggests 2 megabytes), GS/OS System Software 5.04, one 3.5 inch drive and a Hard Drive. There six disks in the HyperCard package that take up about 3.7 megs. on a hard drive, however, to run HyperCard, all you need are the program and Home stack files.

Manuals

The HyperCard package comes with three manuals with over 700 pages of information. The first manual, Getting Started covers the installation, the basic concepts of HyperCard and the modifying of stacks.

The Reference manual is the largest of the three and covers all the menu options and it shows how to use many of the features of HyperCard.

The final manual is the Scripting manual. This is a beginners introduction into scripting. It covers a lot of the basics of HyperTalk, however, I soon found that I needed something more. Hence I have ordered another HyperTalk manual.

Priced just Right

Apple Computer has classed HyperCard IIgs as System Software so you can get a free copy at any dealer or user group (you will need to supply the disks). It comes on six disks (eight if you do not have System 5.04). Manuals are not included.

HyperCard IIgs is also available with the three manuals described above for $125.00. However, with your Apple-Q membership card you can pick it up for $112.50. Computer City currently have it in stock and I recommend that you buy the full package.

The Good, Bad & Ugly

Apple's HyperCard language, HyperTalk, is very powerful. I have written a stack that looks at another stack and copies all the scripts from every background, card, button & field and stores them in a text file. It was all done without using XCmds.

The two things that disappoint me about HyperCard are not being able to edit colour palettes easily and being limited to just one text font, size, style, colour etc. in a field.

Congratulations Apple, a great program, it's easy to learn and with the use of XCmds, you could do almost anything.

Have you sent in your Survey Form yet . . . .
Let us know what you want to see and do ! !

Macintosh Mumblings

By John Finch

Well, System Seven has finally arrived, even if it is not generally available yet. At the time of writing this I am using an imported version of the USA release of system seven. It works on my Mac plus, with the 2.5 Mbyte of memory I have on board, and I can report that all the programs I have tested so far, ran perfectly well with one exception. The one exception was OnQue, which crashed impressively. The main problem with System Seven is it's size, it gobbles up so much memory, so that even 2.5 Mbytes is not enough to open more than one application at a time.

The only other comment I can make at this time is that, on my Mac plus, programs appear to run noticeably slower under System Seven. Normally the word processor I use keeps up with my typing, but now, with System Seven running, if I get going at full steam the on-screen view sometimes falls a little bit behind, either my fingers have become faster or the program is slower. Also some games were noticeably slower to play. Anyway it has not crashed on me inspite of my best efforts to upset it. This system is claimed to be the most solid bomb-free one yet, and my first impressions seem to confirm this.

All the reports I have seen about System Seven talk about how it runs on one of the later Macs, but may of us are still making do with Mac pluses and the like. On these machines the colour does not show up quite the same!

One feature that works very well on the 'Plus' is the desk accessory "Views". This allows you to customize your desktop by changing the font style and size, change the icon arrangement etc. I know this could be done previously by "Layo", but the new desk accessory is very effective and easy to use.

What promises to be the best feature of the new system is its ability to network more fully. I haven't seen any real information on this area, but what I have seen suggests that there is a new sensation on our hands. The new networking Macintosh.

I hope, by the next meeting, to have all the System Seven disks so that people can obtain copy.

Apple has sent the club a number of System Seven "Sniffer" disks. These disks contain a Hypercard stack that will test out your computer to see if you are ready for system seven. It will create a report on your hardware and the software installed on your hard disk, giving advise on whether the software will run without upgrading. The sniffer disk is terribly pessimistic, so do not take too much notice of it , as some of the programs it worries about seem to run OK. This disk will be available for free at the next meeting.

I now want to give a bit of praise to NEC. I was persuaded, by a smooth talking salesman, to buy a NEC hard disk for my Mac. Naturally, after selling me the drive that retail outlet departed from the world of commerce, so that when the drive gave trouble I had no where to go and thump desks. I got in touch with NEC, who told me that they did not sell that particular disk for use with the Macintosh, as it was known to be incompatible; however, they supplied me with new software drivers, which seems to have fixed the problem. They were under no obligation so to do, so the act was one of good customer support on their part. **Thank you NEC.**

The Macintosh public domain library continues to grow, albeit slowly. There are a number of demo disks that I have recently added. The latest being a demo of "Sybiz" accounting package.

Apple have recently decided to include the user groups in their technical support scheme that was previously confined to dealers. So if you have a genuine problem, that cannot be solved by conventional means, then talk to your friendly committee member and we will see if we can get an answer from Apple.

Only Me

The only thing between my shadow and the sun for 93 million miles is me . . . .

I'm always getting in the way of something . . . .

- Peter Payack

Accelerate Your TransWarp GS

Part Two

By John Link

This is the second of a series of articles taken from AppleWorks Forum (April 1991), the newsletter of the National AppleWorks Users Group (NAUG), that describe how to significantly improve the performance of a TransWarp GS Card without voiding it's warranty.

The author assumes that you have read the previous article in this series.

(Refer to either the May 1991 Edition of the AppleWorks Forum, or Apple-Bug, June 1991 for the previous article - Ed.).

Last month, I described how to upgrade the cache memory on an Applied Engineering TransWarp GS (TWGS) accelerator card from 8K to 32K. That modification significantly improves the performance of a TWGS without changing the card's 7 MHz processing speed.

This month I will describe how to increase the Applied Engineering TWGS card's processing speed up to 7.5, 8.0, 8.5, or 9.0 MHz. The modifications for which, are both simple, and relatively inexpensive changes to make.

Next month, I will discuss how to obtain a processing speed of 10 MHz, a modification that is more complex and more costly than the others I have described in this series.

Upgrades are Symbiotic

Increasing TWGS cache size and processing speed are separate upgrades; you do not have to install one to get the other to work. Nor does it matter which upgrade you install first. However, the cache and the processing speed modifications interact with each other to generate exponential improvements in performance.

As you saw from the graph (Figure One) in last month's article, you get a 22% improvement in performance when you increase the TWGS cache from the standard 8K to 32K. When you increase the processing speed of a standard 8K TWGS from 7 MHz to 9 MHz, you get a 15% improvement in performance. But the performance of the TWGS accelerator card improves by 48% (Instead of the "expected" 37%) when you install both modifications on a single card.

Thus, I recommend that you install the cache upgrade in conjunction with any of the processor speed upgrade modifications to your TWGS accelerator card. Figure One in last month's article shows the performance gains you obtain from each modification, and how the processor speed modifications interact with the cache upgrades.

What about the Warranty?

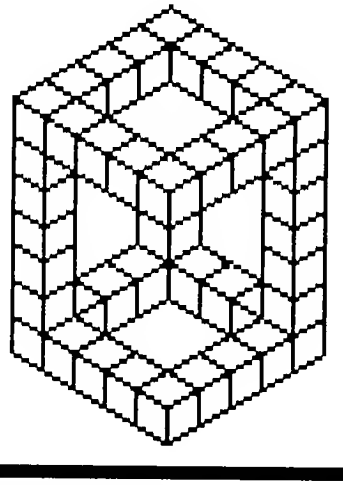
These changes do not void your warranty. If these enhancements do not work on your board, restore the original components to their respective sockets, and your TWGS card should once again operate at its standard 7 MHz speed.

You should also restore the original components to the board if you return your TWGS card to Applied Engineering for repair. Applied often repairs boards by swapping a defective board for a new one, and you would lose your high speed parts in the process.

Qualifying Your TWGS ROM

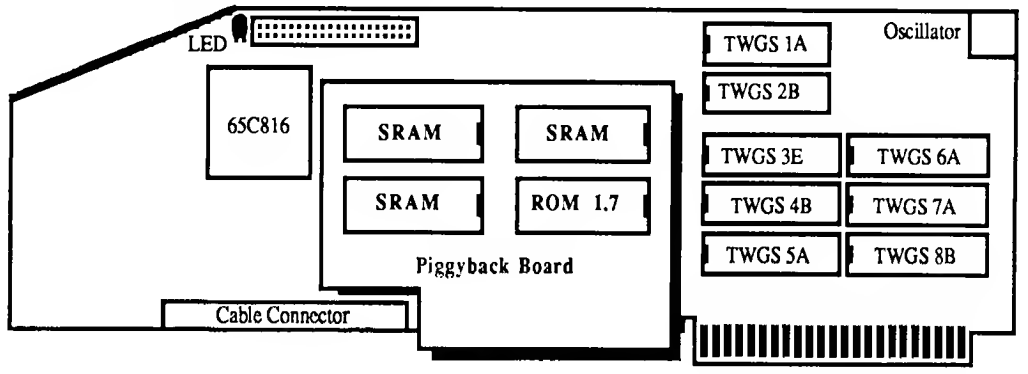
If you installed the 32K cache upgrade I described last month, you have the latest version of the TWGS on-board ROM. Otherwise, follow the directions in the manual and invoke the TransWarp Desk Accessory. If the eighth line of text on the first screen says "Revision 1.5" (or greater), your TWGS will run at speeds above 7 MHz. (Version 1.5 ROMs report false error messages in the speed self-test when the TWGS runs faster than 8 MHz. You can ignore those messages.)

If you do not have the appropriate ROM, I recommend that you install the TWGS Cache Upgrade Kit I described last month. That kit includes both the most recent ROM (version 1.7 is current) and also the recommended 32K of cache memory. Alternatively, Applied will ship just the current ROM as a special order item for $20.00.



Example One:
An eye-see-metrick view . . . .

Figure 1: TransWarp GS Card Layout



Replacing the ROM

The ROM is the only socketed chip on the piggyback board (see **Figure 1**). You can remove the ROM with a standard IC puller (they cost about a dollar at Radio Shack), or insert a small screwdriver under each end of the chip and carefully pry it out. I recommend the chip puller. If you use a screwdriver, make certain that you do not destroy any traces underneath the chip with the screwdriver tip. (One method to protect the traces is to use the edge of the Piggyback board as the fulcrum for the first "prying" and then put a thin piece of cardboard under the screwdriver tip whenever it contacts the board.)

Removing the TWGS ROM from the socket will expose the 28 holes which held its pins. Applied uses a "zero profile socket mount" for the ROM; it is sometimes difficult to insert new chips into these mounts. The new ROM comes with its pins spread out to facilitate its use in auto insertion machines. You will have to bend these pins to the vertical position so they fit into the socket without deflecting underneath the chip.

Place the new ROM on its side with one row of pins resting on a flat table; then rotate the chip until the pins are almost vertical. Repeat this process for the other row of pins. Place the chip over the socket, and make certain that all the pins line up correctly. Repeat this procedure until all the pins line up. Do not force a misaligned chip into a zero profile socket, or you may bend one or more of its pins underneath the chip.

Finally, note the location of the notch on the ROM chip in **Figure 1.** Install the new ROM with that orientation.

If coping with a zero profile mount seems too difficult, you can buy a standard 28 pin low-profile socket (Radio Shack Part #276-1997) for less than a dollar. Insert the new ROM into the low-profile socket by inserting the pins on one side of the IC slightly, then rotate the chip so the second side lines up. Then press the chip in place. You still must be careful not to bend a pin underneath the chip, but it is much easier to insert a chip into a low profile socket than into a zero profile mount. Note the location of the notch, and insert the entire package into the TWGS. The low-profile socket is easy to insert into the card.

Qualifying Your TWGS Cable

Some TWGS owners experience problems with the cable that attaches the TWGS to the motherboard. Continuity tests show that these cables pass a small test current, but the cables are unreliable in actual use. This problem generally appears after you stress the cable by removing and reinstalling the TWGS. If you experience intermittent failures of an unexplained origin that go away when you replace the TWGS with your original 65C816 CPU, contact Applied for a replacement cable. Applied ships an improved cable with all boards manufactured after November 1, 1990.

8 MHz for Five Dollars

The processing speed of your TWGS is determined by an oscillator, which is a timing device that determines how fast the TWGS executes the instructions in its cache. It takes four cycles of the oscillator for the processor to execute a single instruction. Thus, a TWGS card with a 28 MHz oscillator processes instructions at 7 MHz.

Check the speed printed on the oscillator on your TWGS card (see **Figure 1**). Applied shipped TWGS cards with 28 MHz and 25 MHz oscillators which operate at 7 MHz and 6.25 MHz respectively. Owners of 7 MHz TWGS cards can usually increase the speed of their system just by changing the oscillator. Owners of 6.25 MHz accelerators will also have to replace the CPU to get any processing speed improvements.

Replacing the oscillator is the easiest, and least expensive way to increase the processing speed of your card, and many vendors sell suitable oscillators for the TWGS for less than $5.00. Almost all 7 MHz TWGS cards will run reliably at 7.5 MHz if you substitute a 30 MHz oscillator for the 28 MHz part originally on the card. My work suggests that

approximately 80% will run reliably at 8 MHz with a 32 MHz oscillator. Some will work at 8.5 MHz, using a 34 MHz oscillator (but 34 MHz oscillators are hard to find), and a few will run at 9 MHz, using a 36 MHz oscillator. As a practical matter, anyone who wants 9 or 10 MHz processing speed should also plan to replace the CPU, as described below.

The TWGS uses a hard-to-find "mini TTL" or "1/2 TTL ' oscillator that fits into an 8 pin socket. Radio Shack does not carry oscillators, so you should check with a specialized electronics store. (Take your original oscillator to the store if you are uncomfortable describing what you need.). If you cannot find the mini TTL oscillators, JDR Micro-devices sells standard "full TTL" oscillators that you can modify to fit on the card. (See the sidebar {Note} entitled "Modifying a Full TTL Oscillator " for the details.)

Installing the Oscillator

You do not have to remove the TWGS card to upgrade the oscillator. Just follow these simple steps:

1. Turn off your computer but leave it plugged into the wall receptacle.

2. Remove the cover and ground yourself by touching the power supply *{use the back of your hand for safety - Ed}*.

3. Remove the oscillator by gently pulling it straight off the card with just your fingers. **Note** - The square corner of the oscillator (which is also marked with a dot) goes in the upper left hand corner of the socket, and that the oscillator has only four legs; the middle four holes in the socket are not used.

4. Insert the faster oscillator into the socket and test your system. **Note** - RamKeeper memory card owners who cannot boot their systems with the accelerated TWGS will have to reinstall and reconfigure their AEROM disks as described in the manual. Set the system and TWGS speeds to "Normal", then reinstall and reconfigure your RamKeeper.

5. Finally, restore the TWGS to "TransWarp" and the system speed to "Fast", and test your system.

This procedure works because the 7 MHz processor on your card passed a test which proves it will operate reliably at 7 MHz under the worst possible conditions. These include high ambient temperatures and low voltages on the 5 volt line that supplies the card's power. In some cases, the chip was not even tested for its ability to work at a higher speed, and may well have passed a higher test speed. Your system's conditions may be more optimal than those for which the TWGS was designed; your chip may operate faster than its 7 MHz rating, or both. By installing a faster oscillator, you are in effect testing your chip for higher speed operation in your particular system. Many of them will pass.

Upgrading to 9 MHz

The TWGS uses PLCC 65C816 (44 pin) chips for its CPU. Western Design center sells high speed versions of the 65C816 for $US95.00 as "engineering chips" (Part # W65C816PL-ENG). These chips are direct replacements for the original CPU on the TWGS. [Ed {NAUG} - NAUG members can get these chips from Western Design for $US71.25, identify yourself as a NAUG member and supply your NAUG ID number when you Order.] These high speed processors will run reliably at 9 MHz, and most will work at 10 MHz if you make the modifications that I will describe in next month's article. (Those who ultimately want to achieve 10 MHz performance will suffer no harm by buying their engineering chip this month and by first installing the 9 MHz upgrade.)

Western Design ships each engineering chip with its own shmoo plot. You do not have to understand the shmoo plot to use the chip, but next month's article will describe how to interpret the information on the plot that came with your chip.

To achieve 9 MHz operation, you will need both a high speed 65C816 and an oscillator rated at 36 MHz.

Theoretically, some of the socketed parts on a standard Applied Engineering TWGS card should not perform reliably above 8 MHz. However, all three of my test boards have been running reliably at 9 MHz for more than four months, using nothing but standard parts. I am confident that virtually all users will be able to achieve 9 MHz performance, especially if their system is equipped with a fan. However, it is not possible for me to absolutely guarantee that everyone will experience my level of success.

Installing the New CPU and Oscillator

Follow these steps to modify your TWGS for 9 MHz operation:

1. Turn off your computer, remove the cover, and ground yourself by touching the power supply.

2. Remove the TWGS by reversing the installation Procedure described in the TWGS manual.

3. See **Figure 1** for the location of the processor socket, which surrounds the 65C816 chip. Straighten a fairly stout paper clip and bend the last half inch so it forms a 90 degree angle with the shaft.

4. Each corner of the processor socket has a slot that is wide enough to admit a paper clip. Insert the bent end of the paper clip into one of the four slots in the socket until it is underneath the chip. Gently pry upward, using the paper clip as a lever; then repeat the process in each corner until the chip is free.

Modifying a Full TTL Oscillator

Both the standard, and hard to find mini-oscillators use four pins arranged in the same relative position on the oscillator package. To use the larger oscillator package with the TWGS, you must solder extensions onto the two lower legs, then bend the extended legs so they fit into the smaller 8-pin socket used by the TWGS card.

You will need an oscillator, a low wattage soldering iron, some electrical rosin core solder (not acid core), one large light emitting diode (less than $1.00 at Radio Shack and other electronic stores; you will use the wires on the LED as the extensions to the legs on the chip), a nail clipper or small scissor, a short piece of electrical tape, and small needle-nose pliers {any stiff wire will do the job if you don't wish to destroy a led, and small diagonal sidecutters are preferable to 'nail clippers' or scissors - Ed}.

The diagram in **Figure 2** shows the layout for the legs on the oscillator, using the one square comer on the chip as the reference. Leave pins 1 and 2 alone, you need to solder 'extensions' onto pins 3 and 4 only. Follow the steps below, and you should have no problems with this simple modification.

1. Preheat the soldering iron for ten minutes or until it is hot enough to melt the solder.

2. "Tin" each leg of the LED as follows:

   A. Separate the legs of the LED and hold the unit by the plastic housing.
   B. Apply the soldering iron and a minimum amount of solder to one leg until it flows.
   C. Repeat this process for the other leg.

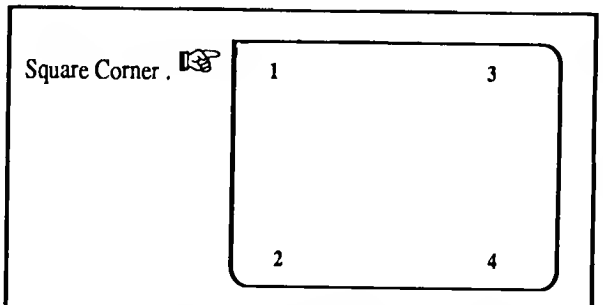


Figure 2: Standard Oscillator pin layout

3. Repeat step #2 and tin the tips of legs {pins} 3 and 4 on the oscillator. Use enough heat to cause the solder to flow, but avoid over heating.

4. Lay the oscillator on the table with its legs pointing up. Grasp the LED by its plastic end, and hold the LED against leg 3 on the oscillator while applying heat from the soldering iron. When the solder flows, remove the iron, but continue holding the leg of the LED against the oscillator leg for a moment until the solder sets.

5. Cut off the leg of the LED just below the plastic head on the LED, and then repeat the process for leg 4 on the oscillator package. Once both 'legs' have been 'extended', trim both of the soldered on 'leg extensions' so the 'new' oscillator legs are approximately twice as long as the original ones.

6. Use the needle-nose pliers to bend the extended legs in an "S" curve so they fit in the holes on each side of the 8-pin socket on the TWGS card. Be certain that the bent leg does not contact the metal case of the oscillator (Contact with the metal case will cause the TWGS to fail upon boot up but will not damage the board or computer. Once you correct the problem, your computer will work normally.).

7. Attach a small piece of electrical tape to the bottom of the oscillator before you insert it in the TWGS. That will keep the modified legs from contacting the oscillator case when you insert the oscillator in the TWGS card. Do not omit this step.

8. Insert the oscillator in the appropriate TWGS socket {check your manual and **Figure one**}.

5. PLCC chips are "keyed" with one corner of the chip "cut off". Line up the new CPU with this cut off corner positioned above the upper left hand comer of the socket (viewed with the TWGS facing You). Press the new chip down carefully using only finger pressure until it is fully seated in the bottom of the socket.

6. Replace the oscillator with one rated at 36 MHz using the procedure described above.

7. Reinstall the TWGS. Be certain that the cable is connected securely to both the IIGS motherboard and the TWGS; loose connections at these points can cause an other wise successful modification to fail.

Testing Your Modified TWGS

9 MHz: You should not have to test the 9 MHz upgrade

extensively, since engineering 65C816 chips should run this fast with ease. Immediately after booting up, run the TWGS built-in self-tests according to the instructions in the Applied manual. TWGS cards equipped with version 1.7 ROMs should not fail any test. Version 1.5 ROMs will fail the speed test, but that is not significant. Use your system to do unimportant work for four hours and once again perform the TWGS self-tests. After four hours, you can proceed with normal use. Back up your work frequently until you are confident that your upgraded TWGS performs reliably.

Simple Oscillator Swap

The simple oscillator replacement requires a more cautious approach, since you are pushing your CPU to its limit. Use the test method I described for the 9 MHz upgrade, but extend the continuous run time to 48 hours, and save your important work frequently until your are certain your faster TWGS performs reliably. Applied Engineering, and Western Design Center both say that running normal software after the warmup is the best way to confirm that the upgraded board is reliable. I found one case of an over accelerated 65C816 (on a TWGS modified only by replacing the oscillator with a fastest version) that passed all the self tests, but which was not entirely reliable after being left powered up for 48 hours.

What If It Fails . . .

Start by installing a system fan if your high speed computer doesn't operate reliably. The cooler your system, the more reliably it will work at these higher speeds.

If you are using a modified full TTL oscillator, make certain that you installed the small piece of electrical tape described in step #7 of the "TTL Oscillator Mod." sidebar.

If neither of these fixes solves your problem, replace the oscillator with one that operates slightly slower, until you achieve reliable operation. You can also replace your power supply with a special configured heavy duty unit from Applied Engineering; I will describe this last remedy next month.

Conclusion

If you follow these suggestions, 80% of all TWGS owners can upgrade their computers to operate at MHz for the $US5.00 cost of a new oscillator. If you already have a fan, it costs a NAUG member less than $US80 to upgrade to a 9 MHz system. This is quite reasonable, considering the overall cost of your IIGS computer, and this is the upgrade that I most likely to succeed. Thus, I recommend the 9 MHz upgrade to anyone who does not want to get involved in uncertainties. Next month's article will describe how to accelerate your system to 10 MHz. Those techniques will build upon the 9 MHz upgrade described here.

[John Link is an AppleWorks consultant and the developer of SuperPatch and LockOut. The author and NAUG extend special thanks to Steven Malechek of Applied Engineering for his help with this article.]

This article was taken from the April 1991 AppleWorks Forum, the newsletter of NAUG: the National AppleWorks Users Group. - Ed

Computers Can . . .

A computer can do more work than man.
One reason that's little known
Is that it never has to stop
To answer the Telephone.

A computer can do more work than man.
One more way to explain
Is that it doesn't stop it's work
To argue and complain.

A computer can do more work than man.
Because it never takes
Those dawdling, lengthy lapses
That we call coffee breaks.

A computer can do more work than man.
And it's easy to see why.
It doesn't sit with it's chin on it's hand
And watch the opposite sex prance by.

A computer can do more work than man.
One reason it's such a whiz:
It doesn't buttonhole passersby
To tell them how busy it is.

A computer doesn't take nervous pills.
All day at the water fountains,
And wastes no time with molehills
Making them into mountains.

A computer can do more work than man.
Because I have a hunch
It doesn't spend three hours
With a customer at lunch.

A computer can do more work than man.
And one good reason I've seen is
It doesn't spend the afternoon
Half conscious due to a few too many martinis.

A computer can do more work than man.
And partly it's a matter
Of not spending all day angling
For the next job up the ladder.

A computer can do more work than man.
Here's a final explanation:
It wastes no time on fears of being
Replaced by Automation.

Macros For Automated Bookkeeping - Part 2

by Brian V. McDonnell

The following article lists the macros referred to in last months issue of Apple-Bug. The macros are designed to help make life easier for those who use AppleWorks for book keeping. Please remember the files for this article are also available to members from the software Library - Ed.

Start

<BA-[>:<all rtn input rtn : ba-*>! AUTO-START if this file is default set.
<ba-*>:<all clear goto ba-[>! AUTO-START if this file is saved as a task file. Clear all variables.
<BA-[>:<all cls msgxy 255,6: msg 'These Macros automate entries in the spreadsheet "BUSINESS". ':msgxy 255,12 :msg 'To add "BUSINESS" spreadsheet file to desktop from current disk, press Return':msgxy 255,16: msg 'Press any other key if "BUSINESS" file is already on the Desktop. ':x = key: if x = 13 then sa-A:endif:ifnot x = 13 then oa-Q endif:input:rtn msgxy 0,128:msg "": goto ba-e>! TITLE SCREEN

Help Screens

The ideas behind these macros are from Beagle Bros Macroease disk (Modified)

<ba-?>:<all : ba-/>!
<ba-/>:<all : putvar 1: {Save present Month }
X = 35 : Y = 4 : A = 9 : C = 9 : D = 0 : S = 1 :
$0 = "HELP" :
$1 = "ServFee Depos = sa-1" :
$2 = "Other Deposits= sa-2" : { X,Y Position of menu}
$3 = "Rent Recvd = sa-3" : { A Lines }
$4 = "Wages D.Smith = sa-4" : { C Lines in Box }
$5 = "Wages P.Jones = sa-5" : { D Skip Lines }
$6 = "Wages J.Brown = sa-6" : { S Spacing }
$7 = "Misc.Staff Pay= sa-7" :
$8 = "Electricity =Ctrl-E" :
$9 = "NEXT HELP PAGE ":
ba-a :
ifnot z = 9 then z = 8:endif: { Ended by Escape }
if z = 8 then oa-Q esc esc : { Remove box-Refresh file}
oa-ctrl-x: getvar 1:endmacro: endif: { Clear variables. Reset Month}
if z = 9 then ba-H>! { Goto Page 2 Help screen }

<ba-H>:<all :X = 35 : Y = 4 : A = 9 : C = 9 : D = 0 : S = 1 :
$0 = "HELP Page 2." :
$1 = "Ultra System = Ba-Z" :
$2 = "Tickles P/L = sa-J" :
$3 = "Bank Fees = Sa-B" :
$4 = "Auto Centre = Sa-P" :
$5 = "Advertising = Ctrl-P" :
$6 = "Telecom = sa-)" :
$7 = "Holy Cross = Sa-W" :
$8 = "Group Tax = sa-G" :
$9 = "FringeBenefitT= sa-F" :
ba-a :
if Z = 0 then: oa-ctrl-x:getvar 1 :msgxy 0,128:stop : else : {Menu cancelled by Escape.Reset Month}
ifnot Z = 1 then Z = 1 :endif:
if z = 1 then oa-Q esc esc : {Menu cancelled by Return}
oa-ctrl-x:getvar 1:msgxy 0,128:stop>! {Clear variables Reset Month}

<ba-a>:<asr><poke 65396, 0 : poke 65398, S : poke 65397, X + 3 : poke 65399,
Z : B = A : A = C + 2 : Z = Y : sa-% : Y = Z : Z = Y + D + 3 : T = 30 - len $0 / 2 + X : msgxy T, Y + 1 : msg $0 : msgxy X + 2, Y + 2 : msg &SSSSSSSSSSSSSSSSSSSSSSSSSSS& : A = B : sa-& : Q = peek 3 : if Q = 209 then oa-Q oa-ctrl-x getvar 1:stop : else : ifnot Q = 0 then rpt : endif : display 0 :msgxy 0,128 :oa-O display 1 : esc>!

&:<asr><if A = 9 then menu $1 : menu $2 : menu $3 : menu $4 : menu $5 : menu $6 : menu $7 : menu $8 : menu $9>!

%:<asr><msgxy X, Y : msg " _____ " : begin : Y = Y + 1 : msgxy X, Y : msg & Z N & : A = A - 1 : if A > 0 then rpt : endif : msgxy X, Y + 1 : msg & Z& + " _____ " + &N & : msgxy X, Y + 2 : msg & LLLLLLLLLLLLLLLLLLLLLLLLLLL &>!

Subroutines

All 'asr' macros are only called by other macros and therefore are used as subroutines. They must be defined first in the macro table (ie. before other macros using the same letters). Do not 'goto' an 'asr' macro.

1:<asr Q = peek 3156:oa-q esc>!
2:<asr : oa-q print q : rtn>! return "2" the file we left
G:<asr posn x,y :$9 = $8 +str$ y:oa-f>c<oa-y :print $9:rtn>!
MOVES CURSOR TO APPROPRIATE ENTRY COLUMN
<ctrl-n>:<asr $0 = screen 7,1,15 : x = 15 : begin : $5 = right $0,1:if $5 = " " x = x - 1 : $0 = left $0,x : rpt>! USED BY SAFE SAVE
<Ctrl-\>:<Asr>PA<Rtn:oa-l:Rtn>lr! PERIODIC AUTHORITY PAYMENTS
<Ctrl-_>:<Asr>"/<Rtn:oa-l:Rtn>lr! MISCELLANEOUS BANK DEDUCTIONS

Updating These Macros

Whenever payment values change add this file to the desktop, make any necessary corrections then press Both-Apple-U to save and recompile the macros. Next press Both-Apples-V to update the task file for next time.

<ba-U>:<awp oa-ctrl-S cls msgxy 255,12:msg 'After Macro set is compiled use BA-V to update TASK.BUSINESS' :wait 400:msgxy 0,128 msg "": ba-C>! UPDATE BUSINESS MACRO TASK FILE

<ba-V>:<awp ba-O>2<rtn>TASK.BUSINESS<rtn >Y<spc esc>! UPDATE TASK FILE

Macros For Auto Entry Of Periodic Payments.

These macros are called whenever macro 5 is used (normally weekly). They scan the spreadsheet to determine whether the due date for an auto entry has been reached. If the payment is due the sheet is scanned to determine if payment has been made and if not will proceed with the entry. The auto entries in this demonstration set are encompassed in Macros "I" (Insurance Superannuation), Macro "**R**" (Regular rent payment), Ctrl-W (Watkins P/L Rent) and Macro "L" (CTB Loan repayment).

```
3:<asr :j=0:k=0:m=0:n=0:w=0:          {clear variables}
begin $0 = cell:$4 = left $0,3:       {read current month}
if $4 = $1 then up w=w+1 rpt endif:   {go to top of present months entries}
right down begin $4 = cell: right down begin $4 = cell: column}
if $4 = "j" then j=1:endif: {check if code entry indicates what}
if $4 = "k" then k=1:endif: if $4 = "k" then k=1:endif: paid}
if $4 = "m" then m=1:endif: {and if so set 'flag' to 1}
if $4 = "n" then n=1:endif:
down:w=w-1:if w = 0 then exit else rpt   {exit loop after reading last entry}
sa-j sa-k sa-m sa-n>!                    {call the task macros}
4:<asr : $0 = screen 12,23,2: P = val $0>! {Read day of the month into variable "P"}
j:<asr :if P>0 and j< 1 then j = j+1:goto sa-R :endif>! RENT DUE 1ST OF MONTH
k:<asr : if P>0 and k < 1 then k = k+1: goto Sa-Ctrl-W :endif>! WATKINS P/L RENT PAYMENT DUE 1ST OF MONTH
m:<asr : if P>14 and m<1 then m = m+1:goto sa-l:endif>! SUPERANNUATION DUE 15TH
n:<asr : if P>21 and n<1 then n = n+1:goto sa-L:endif>! LOAN PAYMENT 22ND OF THE MONTH
<ba-n>:<asr sa-left print $3:msg 'RETURN TO CONTINUE ESCAPE CANCELS':x = key:>!
<ba-t>:<asr cls msgxy 255,12:msg 'CANCELLED BY ESCAPE':msgxy 0,128:wait 1200: esc esc esc stop>!
```

Tools To Use.

<Del>:<all oa-del>!
<left>:<all first>!
<right>:<all last>!
<ba-c>:<awp $0 = "Macro Compiler" : SA-\: oa-rtn>! COMPILE MACRO FILE
<ba-e>:<All :Msg 'Please enter the current month eg Jan ': $1 = getstr 3 : Msg "":rtn >! ENTER SPREADSHEET DATE (MONTH)
<ba-m>:<asp $2 = " ": $3 = $1 + $2: sa-left : Print $3 : Msg 'Enter day of the month in this way ..... 01 ....':x=key:ifnot x =27 then $0 =getstr 1:print chr$ x +$0:else left:cls :msgxy 255,12:msg 'Cancelled by Escape':msgxy 0,128:wait 1300:esc esc stop:endif :sa-4 right : msg "">! ENTER SPREADSHEET DATE (DAY)
<BA-Z>:<all launch "ULTRA.SYSTEM">!
RETURN TO DEFAULT ULTRAMACROS

A:<all:oa-Q esc rtn rtn>! ADD FILES
E:<all:oa-E>! CHANGE EDIT CURSOR
H:<asp:oa-F>C<oa-Y>A1<rtn>! HOME
<Ctrl-C>:<all sa-1>5<rtn>2<rtn: x = key:esc sa-2>! CATALOGUE DISK
<ba-L>:<asp oa-L>EVF0<rtn>! NUMBER LAYOUT
<Ctrl-L>:<asp oa-L>EVD2<rtn>! DOLLAR LAYOUT
Q:<all:oa-Q down rtn>! NEXT FILE
<ctrl-Q>:<all:oa-q up rtn>! GOTO THE PREVIOUS FILE
<ba-+>:<asp:oa-L>C<rtn>C<oa-right>! CHANGE THE COLUMN WIDTHS
`:<asp:up oa-C rtn rtn down rtn down>! COPY THE ENTRY ABOVE (ASP)
<ctrl-A>:<asp:oa-A oa-9 rtn rtn>! ARRANGE COLUMN BY A-Z
<ba-ctrl-A>:<asp oa-A Oa-9 rtn>3<rtn>! ARRANGE COLUMN BY 0-9

Saving And Backing Up Macros

<ba-S>:<all:Q = peek 3156 : begin : sa-2 : oa-Ctrl-S A = peek 2000 : if A = 239 rtn sa-ctrl-N : esc>5<rtn>4<rtn find : rtn>Y<rtn rpt : elseoff : if A = 242 bell : stop:endif:msg 'FOR BACKUP COPY CHANGE DISKS AND PRESS "Y": ANY OTHER KEY CANCELS ':X=KEY:if x = 89 or x = 121 then oa-s else ifnot x =89 or x=121 then msg ":stop>!
SAFE SAVE (Courtesy of Beagle Bros Macrotools disk)

People who think they know it all . . .
Are especially annoying to those of us that do.

Credit Entry Macros

1:<asp $8 = "Z":sa-g:Print $1:right input: rtn ba-L: right right input: down first>! ENTER SERVICE FEE DEPOSITS

2:<asp $8 = "Z":sa-g:Print $1:right input: rtn ba-L: right:right right input: down first>! ENTER DEPOSITS

3:<asp $8 = "Z":sa-g:Print $1:right >01<rtn ba-L: right>250< down first>! ENTER RENT FROM SHOP PARTLY SUBLET -- DUE IN 1ST OF MONTH.

Automatic Debit Entry Macros.

The general format of these macros is as follows:-

a. Enter the day of the month

b. Cheque payee is entered automatically. You may be invited to complete the entry (eg Macro S), or sometimes enter in full eg Macro number seven.

c. Enter Cheque number manually in Column D. Automatic "periodic authority" payments made from the Bank A/C are characterised by "PA" appearing in Column D. Similarly bank fees and other non-cheque deductions show "/" in this column.

d. Macro "G" ('asr') moves the cursor to whichever column is specified currently in $8. After the entry is made the cursor returns to the left and to the next row.

e. Spreadsheet calculation (best set to Manual recalculation) will enter the cheque number also into column "V" and will enter the cheque total in column "X" ready for comparison with bank statements. Column "W" is designed for marking off the entry (using Macro "N") when this Bank Reconciliation is being done.

f. To change the Month press macro Both-Apples-E

Salary Macros

A code letter to identify each employee is entered in Column B of the spreadsheet to enable easy sorting for calculation of individuals total wages.

4:<asp ba-m>a<right>D.Smith<right input:right>171.35<down first>! REGULAR SALARY, PART-TIME EMPLOYEE.

5:<asp ba-m>b<right>P.Jones<right input:right >296.43<rtn first sa-3>! REGULAR SALARY FULL TIME EMPLOYEE. ALSO CALLS AUTO DISBURSEMENT ENTRIES

6:<asp ba-m>c<right>J.Brown<right input: right input:down first>! VARIABLE SALARY PART TIME EMPLOYEE

7:<asp ba-m:msg 'Insert code letter': input: msg "":right:msg 'ENTER
EMPLOYEES NAME ': INPUT: msg "": right oa-l>EVF0<rtn input: right input:down first>!
MISCELLANEOUS EMPLOYEES SALARIES.

Recurring Expenses Macros

B:<asp ba-m $8="R" right>Interest/bank fee<right sa-ctrl-_ rtn sa-g $8 = "V" :sa-g:sa-ctrl-_ down first>!
BANK FEES

C:<asp ba-m $8 = "M" right>Petty cash/Stamps<Right input : right sa-g input : right: $8 = "T":sa-g: input : down first>!
PETTY CASH

D:<asp ba-m $8 = "R" right>Federal Debits Tax<right sa-ctrl-_:rtn : sa-g: input:rtn $8 = "V":sa-g:sa-ctrl-_: down first>! DEBITS TAX

<Ctrl-E>:<asp ba-m $8 = "O" right>SEQEB<right input right sa-g: input :down first>!
ELECTRICITY

F:<asp ba-m $8 = "T" right>Fringe Benefits Tax<right input : right sa-g: input : down first>! F.B.T.

G:<asp ba-m>d<right> Group Tax<right input : right input : down first>! EMPLOYEES GROUP TAX.

I:<asp msgxy 0,2:msg 'PRUDENTIAL SUPERANNUATION' :msgxy 0,3:msg 'ESCAPE CANCELS':msgxy 0,128 : $3 = $1 + " 15":ba-n: ifnot x = 27 then msg "":sa-4 right >m<$8 = "Q" right>Prudential Super P.Jones<right sa-ctrl-\ sa-g>101.5<rtn $8 = "V"><sa-g: sa-ctrl-\ : down first else ba-t>! STAFF SUPERANNUATION, entry made automatically once monthly.

L:<asp msgxy 0,2:msg 'CTB LOAN ' :msgxy 0,3:msg 'ESCAPE CANCELS':msgxy 0,128 : $3 = $1 + " 22":ba-n: ifnot x = 27 then msg "":sa-4 right >n<$8 = "U" right>CTB Loan Repayment<right sa-ctrl-\ sa-g >1110<rtn $8 = "v" sa-g sa-ctrl-\ down first else ba-t>! BANK LOAN

N:<asp>x<down>!

<ctrl-W>:<asp msgxy 0,2:msg 'WATKINS P/L ' :msgxy 0,3:msg 'ESCAPE CANCELS':msgxy 0,128 : $3 = $1 + " 01":ba-n: ifnot x = 27 then msg "":sa-4 right >k<$8 = "H" right>Watkins Rent<right sa-ctrl-\ sa-g: >801.5<rtn $8 = "V": sa-g: sa-ctrl-\down first else ba-t>! RENT

P:<asp ba-m>r<right>Auto.Centre--<input : right input : right right input : right input : down first>! CAR REPAIRS. ENTER WHICH CAR.

R:<asp msgxy 0,2:msg 'RAY WHITE ' :msgxy 0,3:msg 'ESCAPE CANCELS':msgxy 0,128 : $3 = $1 + " 01":ba-n: ifnot x = 27 then msg "":sa-4 right >j<$8 = "I" right>Ray White Mt.Gravatt (Rent)<right sa-ctrl-\ sa-g >601.60<rtn $8

```
= "V"><  sa-g sa-ctrl-\ : down first else ba-t>!
RENT

):<asp ba-m  $8 = "P" right>Telecom-- <input : right input :
right sa-g input : down first>!  ENTER WHICH PHONE
NUMBER THIS ACCOUNT RELATES TO.

S:<asp ba-m>s<right>Shell Mt.G-- <input : right input : right
right input : right input : down first>!  PETROL A/C. ENTER
WHICH CAR .

T:<asp ba-m>t<$8 = "K" right>Geo Tickle P/L <right input :
right sa-g input : right input : down first>!
CONSUMABLES.

W:<asp ba-m  $8 = "N" right>Holy Cross Laundry<right
input : right sa-g input : down first>!
 AUNDRY

<ctrl-P>:<asp  ba-m  $8  =  "U"  right>Printshop
Advertising<right input : right sa-g input : down first>!
 ADVERTISING

/:<asp sa-?>!

?:<asp msg ' KEYPAD REMAPPED.  RETURN = DOWN.
 ? = DOWN + LEFT.  Escape cancels. ' :wait 400:ba-m right
input right input rtn  begin
  x = key :
  if x = 63 then msg ":down first stop else
  if x = 27 then msg "" : stop else  { escape out; cancel
message }
  if x = 24 then x = 27 else  { "clear" is now "esc" }
  if x = 13 then x = 10 else  { "enter" is now "down" }
  if x = 141 then x = 138  { "oa-enter" is now "oa-down" }
    elseoff  { continue from here no matter what happened
before }
    print chr$ x : { send the keypress to AppleWorks }
    rpt>! Keep doing it until Escape exits  { MISC.
ENTRIES }
```

The author welcomes any comments and suggestions, and can be contacted on (07) 349-5702.

- Brian V. McDonnell

Disks of the Month

by Dale Rodgie

See Jeff or myself at the Software Library at the next meeting or order by mail. Order form appears on the inside back cover of this issue. Blank disks are available from the club in either Double or High Density format. The prices for Disks of the month (on Double Sided Double Density Disks) are as follows:

Disk Type	No Disk	With Disk
5.25 inch	$4.00	$5.00
3.5 inch	$5.00	$8.00

Apple IIgs Utility Disk #10

AudioZap v0.8a - AudioZap is a full-featured sound recording, playback, and editing system for the Apple IIGS computer. A Stereo card is recommended for playback, although AudioZap works just fine in mono. For recording, a SuperSonic (tm), Sonic Blaster, Audio Animator, or HyperStudio microphone card is required. AudioZap has a Load Disk option which loads the disk image (depending on memory). This allows you to extract sounds from FTA ptograms. It can load the following sound formats: Raw data, 8:4 ACE compressed & HyperStudio. AudioZap can also save in those formats plus Apple Standard Instrument Format (ASIF) / SoundSmith instruments.

DataPath NDA v1.01 - DataPath is an Apple IIgs New Desk Accessory (NDA) that *transparently* sets the data directory for your Apple IIgs desktop applications. Why? Well, you may have (like me) noticed that whenever you run a desktop program and select 'Open' from the file menu, the system almost *always* first shows you the directory that you do *not* want to load files from. You may have to go through the tedious process of moving through all your drives to find the data directory. DataPath stops all this. The very first time you select "Open" from the file menu, the directory *you* want is displayed.

DeskTop File Control NDA v1.3 - This NDA gives you many of the features of the GS Finder but within any desktop application that supports NDA's. It can rename a file, move file to a new location on the same disk, deletes files, file copying, view a text file, change the filetype and aux. type of a file, change the access byte of a file, erase or initialize (format) disks.

Font-DA Installer NDA v2.0 - This useful NDA gives you the power to load any NDA, CDA, or Font while using any desktop application that supports NDA's. You can remove NDA's and CDA's - even ones that were loaded in at start-up. It comes with on-line help.

GIF-fy Save - Giffy Save converts Super Hires Pictures (Apple Preferred Format) to the GIF format. The GIF format allows you to share your work with others who different computer types.

Idol v1.0.1 - Idol is an temporary initization file (TIF) that is installed on your GS/OS boot disk. It has been designed mostly for people that boot GS/OS via a floppy or a small hard drive. IDOL will allow you to have Desk Accessories (NDAs or CDAs) on external sources, and then load them for you during the boot process! IDOL only needs 5 blocks of disk space!

II Infinitum Init - When using this init, all desktop programs will then display a II Infinitum picture on the desktop instead of the normal blue desktop.

Key Find v1.0.1 - Most IIGS fonts have more than the standard ASCII characters you're familiar with. They also

contain trademarks symbols, a real division sign, accented vowels, and other assorted goodies. Key Find is a new desk accessory that will display an 11 x 24 cell grid containing the complete character set of any IIGS font. It displays the key combination needed to produce the selected character and it also allows a user to copy the character to the clipboard.

LongPlay v2.0 - LongPlay is a program that plays digitized sound files. However, what makes this program different from the rest is its ability to play sound files of any size, even if they are larger than available RAM.

RAT - Revise Ascii Text v1.00 - RAT is an Apple IIgs desktop text editor that supports Ascii text (filetype $04, TXT), APW/Source (filetype $B0/Src), and Teach (Filetype $50, auxilliary type $5445, GWP) documents. RAT is a rather minimal implementation, however, it does have a number of special features including color and Apple Extended Keyboard support. With RAT, you can set both the foreground and background colour of the text. RAT also comes with online help.

ShowPic NDA v5.4 - ShowPic is an New Desk Accessory that will allow you to view any type of IIGS Super HiRes Graphie, allow you to save that graphic in a couple of different formats, and do some simple color conversions. You may view: It supports ten different graphic file formats including GIF and 3200 colour pictures.

SoundOff! v1.0 - SoundOff! is a CDev and a Permanent Initialization File, which combine, as the first CDev/Init combination ever on the Apple IIGS, to give you control over the System Beep of your computer, and to choose a sound to be played at boot time. You can choose any digitized sound file to be the Startup (boot time) Sound, and any digitized sound file to be the System Beep. These sound files do not have to be located in a particular place on the boot volume - SoundOff! will duplicate the sound data in its own resource fork for easy access.

Super Info II - Super Info is an NDA that combines various types of information into a single NDA. All the information is accessible via Super Info's menu bar, and each page of information can have controls that modify the display and layout. Most values can be displayed in either decimal or hexadecimal forms. Super Info II is also extensible to add information that I didn't think of. This is accomplished by Super Info Modules, simple add on pages of information. Also, you may add text files of information that you might need to get at fast.

SuperView v1.1 - This is the best 3200 colour picture viewer I have seen. It also converts 3200 pictures into Apple's standard file formats (with 3200 colour). Online help is provided.

Two Borders - As you've no doubt noticed, the IIgs has two very different display modes: text mode and graphics mode. Ideally, the IIgs should have TWO border colors; one for text mode and one for graphics mode. When one switches between text and graphics modes, the border should change its color automatically. By installing Two.Borders on your system, this ideal can be realized.

Apple Rx (GS version) - This program is "virus medicine". It will read your system files (and any other types you specify) and create data files (one for each volume) that contains information on these files. At any time, you can run it in check mode and it will report any of these files that have been altered. The program also checks (and in some cases, corrects) some data on the disk, the details of which shall go unspecified.

HyperCard IIgs Stacks Disk #1

Apple II® Technical Notes Stack v1.0 - Here it is! My first HyperCard IIgs stack, and what a stack - weighing in at 1547k. It contains all the Apple II Technical Notes - over 200 of them all in one 'easy to use' stack. You can search for any word or string, dump any of the Technical Notes to either the printer or to a text file on disk. The stack also makes it easy to update or add a new TechNote. You will require ShrinkIt GS to unpack this stack.

Script-o-Matic v1.0 - Script-o-Matic was in responce to a letter in A2-Central. One writer asked if an XCmd was needed to extract scripts from a stack. So I set about to see if it could be done without an XCmd and it can. This stack basically does one thing - it scans the stack you select and dumps all the scripts contained in the stack to a standard text file. Other information like number of cards, background stack size, field and button co-ordinates are also list in the text file. The advantage of Script-o-Matic is that this stack can obtain scripts from some protected stacks.

VaporWare

Taken in part from an article by Murphy Sewall
These are rumors folks -
we reserve the right to be dead wrong!

Apple IIgs to Inherit Mac-like Features

The new, nearly twice as fast Apple IIgs System Disk 6.0 is scheduled for release at KansasFest this summer (mid-July). In addition to Andy Nicholas's revamped GS Finder, major new features will include: Mac and IBM FSTs (permitting reading and writing of disks in those formats), support for the SuperDrive (1.44 Mbyte disks - see last month's column), an Animation Toolkit, midiSynth Tool, and interapplication communication (similar to Windows 3 and Mac System 7). - found in my electronic mailbox

Apple II(gs) Forever (but by Mailorder)

Last month's Apple II's for sale at Sears rumor was off the mark (Sears is busy trying to peddle PS/1s). J.C. Penney's wouldn't even discuss a deal with Apple. However, Apple hasn't given up; they're said to be dickering with Quality Computers, Applied Engineering (some insiders say AE is a long shot), and Soft Warehouse. - found in my electronic mailbox

From the May 1991 APPLE PULP H.U.G.E. Apple Club (E. Hartford) News Letter, $15/year U.S. - $18/year Canadian, P.O. Box 18027, East Hartford, CT 06118. Call the "Bit Bucket" (203) 569-8739. Permission granted to redistribute with the above citation.

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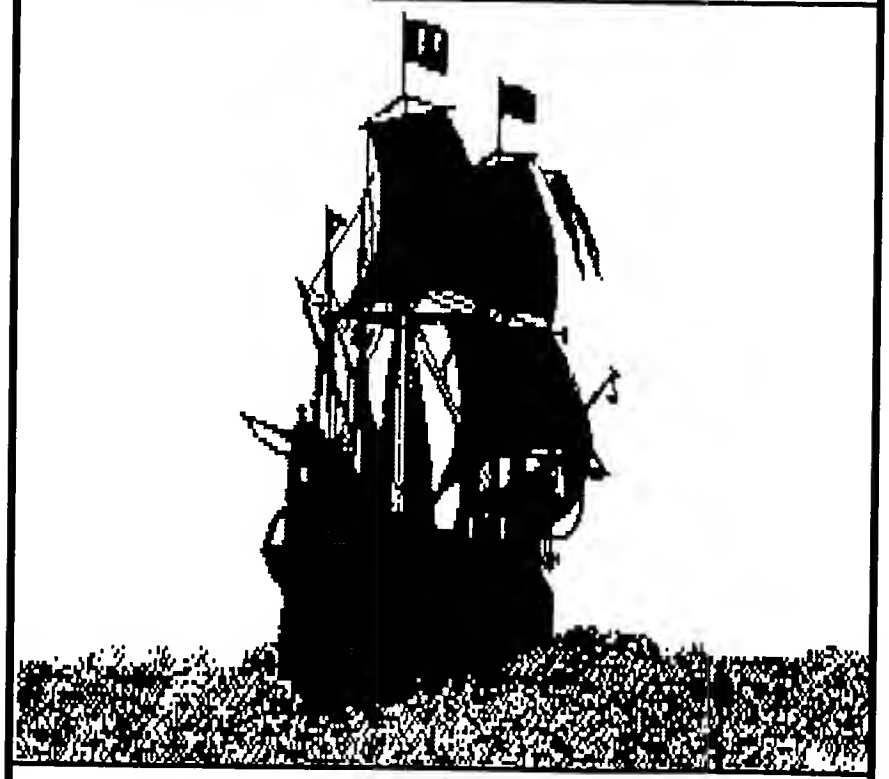

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